

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,327	<b>Applicant(s)</b> NOYORI ET AL.	
	<b>Examiner</b> ROSALYND KEYS	<b>Art Unit</b> 1621	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-19, 21-25, 27, 28 and 30-33 is/are pending in the application.
- 4a) Of the above claim(s) 12, 14-16, 18, 19, 21, 22, 24, 25, 27, 28, 30 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 13, 17, 23, 32 & 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1621

## DETAILED ACTION

### *Status of Claims*

1. Claims 11-19, 21-25, 27, 28, and 30-33 are pending.

Claims 11, 13, 17, 23, 32 and 33 are rejected.

Claims 12, 14-16, 18, 19, 21, 22, 24, 25, 27, 28, 30 and 31 are withdrawn from further consideration.

Claims 1-10, 20, 26 and 29 are cancelled.

### *Election/Restrictions*

2. Claims 12, 14-16, 18, 19, 21, 22, 24, 25, 27, 28, 30 and 31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 16, 2008.

### *Response to Arguments*

3. Applicant's arguments filed April 13, 2011 have been fully considered but they are not persuasive.

The Applicants submit that Watanabe's ruthenium complex has three ligands while Ikariya's complex has four ligands. Thus, the ruthenium complexes of Watanabe and Ikariya are different and one having ordinary skill would not have had any reason or rationale to modify Watanabe's process suitable for a ruthenium complex having three ligands to include Ikariya's hydrogenation process suitable for a ruthenium complex having four ligands.

This submission is not persuasive. The Examiner does not believe, nor has the Applicants presented any evidence to show, that the fact that Watanabe's ruthenium complex

Art Unit: 1621

has three ligands while Ikariya's complex has four ligands will affect the ability of pressurized hydrogen to be effective for reducing the ketone in the process of Watanabe. It is the carbonyl group that is converted to the alcoholic group in the process of Watanabe. Ikariya has shown that this can be successfully accomplished with either a hydrogen donor or pressurized hydrogen. Further, Ikariya also teaches complexes that have three ligands (see for example paragraph 0011, wherein the formula (3) compound n can be zero). Thus, the teachings of Ikariya are applicable to ruthenium complexes having three or four ligands. Thus, the skilled artisan would have reason to believe that the pressurized hydrogen of Ikariya could be used in place of the hydrogen donor of Watanabe.

The Applicants submit that claim 32 requires the ketone compound to have a halogen substituent at  $\alpha$ -position, a chromanone derivative, a diketone, a ketoester, or an indanone.

This submission is not persuasive. The ketone compounds of Watanabe have at least a halogen at the  $\alpha$ -position (see column 4, line 47 to column 5, line 8). Thus, Watanabe does disclose the recited ketone compound and the skilled artisan does have reason to hydrogenate the claimed ketone compound with a reasonable expectation of success.

For the above reasons as well as those given in the previous office action, mailed December 17, 2010, the rejection of claims 11, 13, 17, 23, 32, and 33 under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al (US 6,686,505 B2) in view of Ikariya et al. (JP 11-189600) is maintained .

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1621

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 11, 13, 17, 23, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al (US 6,686,505 B2) in view of Ikariya et al. (JP 11-189600), for the reasons given in the previous office action, mailed December 17, 2010.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1621

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROSALYND KEYS whose telephone number is (571)272-0639. The examiner can normally be reached on M-F 5:30 am-7:00 am and 9:00 am-3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rosalynd Keys/  
Primary Examiner, Art Unit 1621  
June 13, 2011